

SAFETY DATA SHEET
According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

EARTH SCIENCE LABORATORIES, INC.

113 SE 22nd St., Suite 1
Bentonville, AR 72712
earthsciencelabs.com

Emergency Phone Number:
Information Phone Number:

1-800-535-5053 (Infotrac)
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Material Name: ET 4000™

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Section 1 – PRODUCT IDENTIFICATION

Product Name: ET 4000™

Manufactured by: Earth Science Laboratories, Inc.
113 SE 22nd St., Suite 1
Bentonville, AR 72712

Section 2 – HAZARDOUS INGREDIENTS

Components	CAS#	OSHA PEL	ACGIH TLV	%
Nordhausen acid	7664-93-9	1mg/m ³	1 mg/m ³	15-30%
Anhydrous ammonia	7664-41-7	35 mg m ³	17mg m ³	1-5%

Per O.S.H.A. definition also known as 50 Fed. Reg. 48750

Section 3 – HEALTH HAZARDS IDENTIFICATION

Classification

Acute toxicity - Inhalation	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Symbol(s)



Primary Routes of Entry: *Inhalation, Absorption, and Ingestion.*

Eyes: *Corrosive.* Exposure may cause severe burns, destruction of eye tissue and possible permanent injury or blindness.

Skin: *Corrosive, Contact* may cause reddening, itching, inflammation, burns, blistering and possibly tissue damage.

Ingestion: *Corrosive.* May cause painful irritation and burning of the mouth and throat, painful swallowing, labored breathing, burns or perforation of the gastrointestinal tract leading to ulceration and secondary infection.

Inhalation: *Irritating and corrosive.* May cause burns and tissue damage to the respiratory tract.

Section 4 – FIRST AID MEASURES

Eyes: Flush immediately with large amounts of water for at least 20 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

Skin: Immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Get immediate medical attention.

Ingestion: If victim is conscious and alert, give 1-3 glasses of water to dilute stomach contents. Rinse mouth out with water. Do not induce vomiting unless directed by medical personnel. Get immediate medical attention.

Inhalation: Remove to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Keep affected person warm and at rest. Get immediate medical attention.

Section 5 – FIRE AND EXPLOSION HAZARDS**Flash Point:** N/E**UFL:** N/E**LFL:** N/E**General Fire Hazards:** Water applied directly could result in spattering of acid solution.**Hazardous Combustion Products:** May react with most metals to produce hydrogen gas, which can form an explosive mixture with air.**Fire Fighting Equipment/Instructions:** Firefighters must wear MSHA/NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment. Caution should be exercised regarding personal safety and exposure to released product.**NFPA Ratings:** Fire: 0**Health:** 1**Reactivity:** 2**Other:** X**HMIS III Ratings:** Fire: 0**Health:** 1**Reactivity:** 2**Personal Protection:****Section 6 – ACCIDENTAL RELEASE MEASURES****Containment Procedures:** Flush with water into retaining area or container. Caution should be exercised regarding personal safety and exposure to released product.**Clean-Up Procedures:** Neutralize solution with bicarbonate of soda.**Evacuation Procedures:** Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind.**Special Instructions:** Notify local authorities and the National Response Center, if required.**Section 7 – HANDLING AND STORAGE****Application and Handling Equipment:** Application, handling, or storage equipment should consist of fiberglass, PVC, polypropylene, viton, most plastics, aluminum or stainless steel. Always rinse equipment free and clean of ET-4000 each night with plenty of fresh water. Always store ET-4000 above 32° F. Freezing may cause product separation. Seller makes no warranty for the performance of product which has been frozen. ET-4000 micronutrient mix is a non-flammable solution. Store away from excessive heat. Uses in excess of the soil or foliar recommendations may cause crop injury from micronutrient toxicity.**Storage:** Store in a safe place away from pets. KEEP OUT OF THE REACH OF CHILDREN. Store away from excessive heat. ET-4000 will freeze. Always keep container closed. Never store ET-4000 in any other container than its original container. Bulk ET-4000 shall be stored and handled in fiberglass, PVC, stainless steel, polypropylene or plastic equipment. Keep away from galvanized piping and long term nylon storage. Container should be nonreactive to Inorganic acids.**Section 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION****Respiratory Protection:** Ventilation and other forms of engineering controls are the preferred means for controlling exposures. A NIOSH/MSHA approved air purifying respirator with an appropriate acid gas cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.**Personal Protective Equipment (PPE)**

Mixers, loaders, applicators and other handlers must wear the following: long-sleeved shirt, long pants, shoes plus socks, chemical-resistant gloves made of any water proof material (Chemical Resistance Category A), and protective eyewear.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES**Appearance:** Clear liquid**Physical State:** Liquid**pH:** <1**Vapor Pressure:** 0.1mm 68° F**Boiling Point:** 224.4 ° F**Melting Point:** N/A**Odor:** Mild odor**Vapor Density (Air=1):** 1.0**Evaporation Rate:** N/A**Solubility in Water:** Complete**Specific Gravity (H₂O=1):** 1,270

Section 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable.

Conditions to Avoid: Avoid mixing with strong bases and strong reducing agents.

Incompatibility: Incompatible with strong bases and strong reducing agents.

Hazardous Decomposition Products: Sulfur dioxide and sulfur trioxide may be produced with decomposition.

Hazardous Polymerization: Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity / Chronic Toxicity: Continued overexposure to this solution may cause systemic toxicity.

Carcinogenicity: N/A

Signs and Symptoms of Exposure: Overexposure may cause the following specific symptoms, depending on the concentration and duration of exposure: vomiting, shallow respiration and lung function changes.

Section 12 - ECOLOGICAL INFORMATION

Waters treated with this product may be hazardous to aquatic organisms.

Section 13 – DISPOSAL CONSIDERATIONS

Pesticide wastes are acutely hazardous. Improper disposal of excess product mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency, or the hazardous waste representative at the nearest EPA regional office for guidance. In the event of spill, neutralize with limestone or baking soda before disposal. May deteriorate concrete.

Section 14 – TRANSPORT INFORMATION

DOT Information

Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s., (contains sulfuric acid)

Hazard Class: 8

UN/NA #: UN3264

Packing Group: II

Section 15 - REGULATORY INFORMATION

Acidic Amendment. General Use Product. Caution. Keep Out of Reach of Children.

Section 16 - OTHER INFORMATION

Date of Last Revision: March, 2017.

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